Roadway Reconfiguration in Durham

"Road Diets can be seen as one of the transportation safety field's greatest success stories."[1]
-Libby Thomas, Senior Associate, UNC Highway Safety Research Center

What is Roadway Reconfiguration?
According to the Federal Highway Administration, a *Roadway Reconfiguration*, also known as a *Road Diet* "involves converting an existing four-lane undivided roadway segment into a three-lane segment consisting of two through lanes and a center two-way left-turn lane (TWLTL)."[2] The space from the removed through-lane is used for dedicated bicycle lanes.

Four lane roads, such as the section of Fayetteville Road from Pilot Street to George Street, allow large traffic volumes but maximize speeding, crashes, property damage, and injury. From 2009 to 2014, there were 152 recorded crashes on the 0.66 mile section of Fayetteville Road set to receive a Roadway Reconfiguration, resulting in more than $500,000 in damage, 49 injuries, and one death. Analysis by City of Durham engineers concluded that 86 of those accidents were the type that can be reduced by Roadway Reconfiguration.

For decades, Roadway Reconfigurations have been implemented in cities and towns across the United States with positive results, such as increased safety, decreased instances of car crashes and excessive speeding, and improved transportation options for residents. Overall, research has concluded that decreasing the number of lanes has minimal effect on traffic flow but can decrease collisions by an average of 6% and a maximum of 25%.[3]

What are the benefits?
- Safety: Roadway Reconfiguration makes Durham's streets safer by reducing excessive speeding and merging, decreasing traffic collisions, and improving safety for pedestrians, bicyclists and transit riders.
- Transportation Options: Roadway Reconfiguration results in more choices for getting around Durham. The extra space from removing one through-lane is used for dedicated bicycle lanes, giving you the ability to safely choose healthy transportation. For people who do not ride bicycles, an increased number of bicycle commuters results in fewer vehicles traveling on the road and competing for parking. The decreased number of traffic lanes also provides ease of crossing, allowing neighborhoods to be connected for those traveling on foot.
- Cost: Because Roadway Reconfiguration projects are combined with routine resurfacing and restriping projects, there is no additional cost to taxpayers. Roadway Reconfiguration is one of the most cost-efficient ways to improve safety and transportation on Durham's streets.
- Efficiency: With a dedicated turning lane, there are fewer collisions and resultant delays, and with the addition of lanes for people who bike, streets with Roadway Reconfiguration maintain their previous efficiency.

Commonly asked questions…
- Why a Roadway Reconfiguration on my street? In Durham, streets are carefully selected for Roadway Reconfiguration projects based upon research, computer traffic modeling, engineering survey, and crash data. Your street has been selected because of current high accident rates as well as a traffic pattern that research shows would be improved by Roadway Reconfiguration.
- Won't a Roadway Reconfiguration slow traffic in my neighborhood? No. Even though one through-lane has been removed, the addition of the center turn lane means turning cars will have a dedicated place to wait to turn so through-traffic will not have to stop as often. Additionally, cars will not be changing lanes as much, resulting in a smoother traffic flow.
- Will Roadway Reconfiguration require lengthy, expensive construction? No. If your street is getting a Roadway Reconfiguration project, it is because it was already due for repaving and repainting. The

construction cost and time would occur whether or not there was a Roadway Reconfiguration project, so why not improve safety, transportation options, and efficiency at the same time?

- <u>Is Roadway Reconfiguration going to change my commute?</u> For the average daily driver, no. The road will still allow just as many cars to pass with the same level of efficiency. With that said, we hope you will also notice fewer crashes, decreased instances of weaving and excessive speeding, and more choices for getting around your neighborhood!

Roadway Reconfiguration Images…
Erwin Road in Durham:

Road Before

Road After

Top view of project results[4]

Road Before

Road After
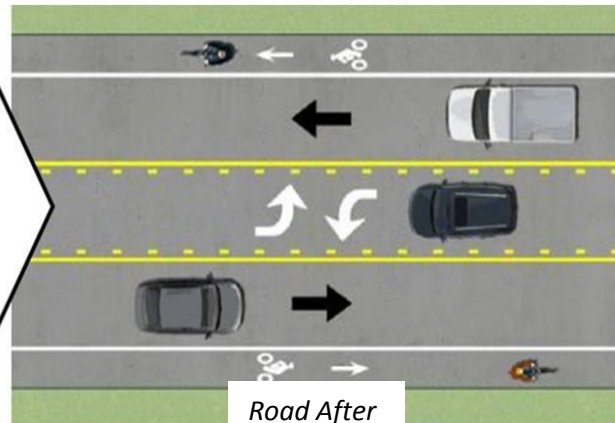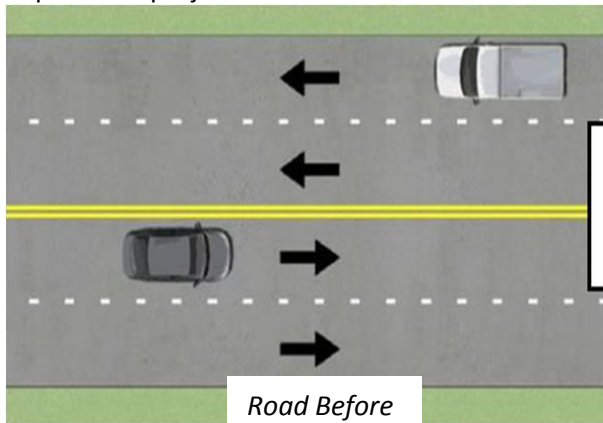
For More Information…
Want to do more of your own research about Roadway Reconfiguration? The following sources can provide more information about methods, research, and results of Roadway Reconfiguration projects:

- *Road Diet Informational Guide* by The Federal Highway Administration:
  http://safety.fhwa.dot.gov/road_diets/info_guide/rdig.pdf
- *Road Diet Conversion: A Synthesis of Safety Research* by Libby Thomas, UNC HSRC:
  http://katana.hsrc.unc.edu/cms/downloads/WhitePaper_RoadDiets_PBIC.pdf
- *Road Diets: Fixing the Big Roads* by Walkable Communities, Inc.:
  http://nacto.org/docs/usdg/road_diets_fixing_big_roads_burden.pdf

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[1] Thomas, Libby. "Road Diet Conversions: A Synthesis of Safety Research." *Pedestrian and Bicycle Information Center: White Paper Series*, no. DTFH61-11-H-00024 (2013). http://katana.hsrc.unc.edu/cms/downloads/WhitePaper_RoadDiets_PBIC.pdf.

[2] Knapp, Keith, et al. "Road Diet Informational Guide." *FHWA Safety Program* FHWA-SA-14-028 (2014). http://safety.fhwa.dot.gov/road_diets/info_guide/rdig.pdf.

[3] "Summary Report: Evaluation of Lane Reduction 'Road Diet' Measures on Crashes." *Highway Safety Information System* FHWA-HRT-10-053 (2010). http://www.fhwa.dot.gov/publications/research/safety/10053/

[4] Ullman, Seth. "Rightsizing Streets." Project for Public Spaces. Accessed February 18, 2015. http://www.pps.org/reference/rightsizing/.